

Listing of Claims

This listing of claims will replace all prior listings of claims in the application:

1. (Original) A global reduction method of the atmospheric carbon dioxide comprising a process of; the decarbonated surface ocean water, of which the concentration of carbonate is reduced by removing carbonate ions such as bicarbonate ion and carbonate ion, absorbs the atmospheric carbon dioxide by chemical equilibrium occurred at the contacting interface between atmosphere and superficial ocean water.

2. (Original) A recovery and reduction method of carbonate from surface ocean water by reacting the coexisting substances, calcium, magnesium, and carbonate, without any additives to the ocean.

3. (Original) A recovery method of carbonate dissolved in the ocean water comprising the steps of; separation of the carbonate from ocean water as the insoluble carbonate precipitates, and sedimentation disposal of the insoluble carbonate precipitates to ocean bottom.

4. (Original) A process comprising the steps of; absorption of atmospheric carbon dioxide to the decarbonated surface ocean water by the chemical equilibrium occurred at the contacting interface between atmosphere and surface ocean water, recovery and reduction of carbonate from superficial ocean water by reacting the coexisting substances, calcium, magnesium, and carbonate to form the insoluble carbonate precipitates, and sedimentation disposal of the insoluble carbonate precipitates to ocean bottom.

5. (Currently Amended) A process according to claim 1 and 4, the reduction method of the concentration of carbonate contained in the superficial ocean water is carried out by the direct electrolysis treatment of ocean water without any additives.

6. (Original) A process according to claim 5 comprising the steps of, increase of carbon dioxide absorption capacity of the ocean water treated by the direct electrolysis led by decrease of the concentration of hydrogen ion in the treated ocean water.

7. (Original) A process according to claim 5, recovery and recycling of hydrogen gas generated simultaneously by the electrolysis treatment of ocean water.